

Report of Programme Officer, Sustainable Energy & Climate Change

Report to Director of Resources and Housing

Date: 26th February 2018

Subject: Air Quality Projects

Scheme Number : TBA

Are specific electoral wards affected? If relevant, name(s) of ward(s):	🗌 Yes	🛛 No
Are there implications for equality and diversity and cohesion and integration?	🗌 Yes	🛛 No
Is the decision eligible for call-In?	🛛 Yes	🗌 No
Does the report contain confidential or exempt information? If relevant, access to information procedure rule number: Appendix number:	Yes	🛛 No

Summary of main issues

- Air quality is now a major issue of growing interest and significance at a national and international level. Leeds was identified in 2015 by Department for the Environment, Food & Rural Affairs (DEFRA) as one of six locations in England that is not expected to meet air quality standards by 2020 and to require the introduction of a Clean Air Zone (CAZ).
- Air quality in Leeds is required to be compliant with air quality legislation as soon as possible to reduce the health impacts of air quality, and avoid fines from European Union.
- Modelling is ongoing to determine the efficacy of delivering a CAZ in Leeds. A first phase of public consultation on implementing a CAZ B Outer Ring Road was completed on March 2nd.
- Additional measures will be implemented to deliver air quality improvements, and support the transition to low-emission vehicles.
- DEFRA have authorised a grant of £1 million for Leeds City Council to assist in the delivery of early measures to improve air quality.

1 Recommendations

- 1.1 The Director of Resources and Housing is requested to:
- 1.1.1 Authorise an injection and authority to spend £1 million of (DEFRA) grant on measures that will assist in the delivery of a Clean Air Zone for Leeds. This spending is broken down into:
 - Support for ULEV Taxi & Private Hire Vehicles £700,000
 - Infrastructure improvement £80,000
 - Communications Campaign £180,000 (Revenue)
 - Bike share scheme £40,000

2 Purpose of this report

2.1 This report aims to seek authority to spend a £1 million grant from DEFRA to assist in the delivery of measures to deliver projects to reduce emissions from transport in support of the CAZ to result in an improvement to air quality in Leeds.

3 Background Information

- 3.1 DEFRA carried out a national assessment of air quality based on the requirements of the EU Directive on air quality. As a result of this, in December 2015 DEFRA published their updated air quality action plan that named Leeds, along with Nottingham, Birmingham, Derby, Southampton, and London as places in the UK that will be not be compliant with nitrogen dioxide (NO₂) targets by 2020, in line with EU air quality targets.
- 3.2 Following legal action by non-governmental organisation Client Earth, the government lost two successive trials at the supreme court resulting in a verdict that previous plans to tackle air quality were illegal on the basis that:
 - Best effort was not being made to meet air quality standards as soon as possible
 - Over-optimistic pollution modelling had been used, which produced inaccurate representations of air quality in towns and cities.
- 3.3 A revised National Air Quality Plan was produced, identifying 28 cities that have the greatest air quality problems. The plan places greater responsibility for reaching compliance upon local authorities than previously. The original five cities, including Leeds, that were named must deliver their Clean Air Zones by the end of 2019. The remainder of the cities have to deliver by the end of 2020.
- 3.4 Emissions from vehicles make up a large proportion of the nitrogen dioxide emitted, therefore efforts will target:
 - A shift to cleaner vehicles

- A shift to low emission transport modes.
- 3.5 Officers within Leeds City Council are undertaking a detailed modelling exercise utilising local air quality, traffic, and fleet data from a number of sites. Modelling has determined that a CAZ B Outer Ring Road (ORR) would bring Leeds to near compliance, requiring additional measures to robustly achieve compliance this will result in non-compliant buses, coaches, HGVs and taxi & private hire vehicles being charged. An exercise will be undertaken in conjunction with the Joint Air Quality Unit (JAQU) to agree what is the right target for the city in terms of emissions reduction and this will be assessed by a panel of independent experts who will consider both the local and national model outputs.

3.6 DEFRA Grant

- 3.7 The implementation of any form of CAZ will require significant expenditure and considerable engagement with both the public and businesses to encourage the shift to alternative fuel vehicles that will improve air quality in Leeds.
- 3.8 Recognising this, DEFRA have made available a grant of up to £1 million for a project to implement key measures to deliver advance air quality improvements prior to and in support of the Leeds CAZ. A bid was submitted by officers in December 2016, and following review by JAQU and subsequent clarifications this was approved in December 2017.

4 Main Issues

- 4.1 *Authority to Spend*
- 4.2 To most effectively utilise the grant from DEFRA, it is necessary to prepare an appropriate finance mechanism to allow for receipt & dispersal of this funding in line with the various projects to be delivered. Full details of the projects to be funded are provided below.

4.3 *Projects to be funded*

- 4.4 The schemes are all based around support for alternative fuel vehicle uptake, infrastructure, zero emission vehicle usage (both cars and cycles) with stakeholder engagement and air quality awareness to assist with delivering wider uptake of low emission actions that that will co-ordinate with, but not duplicate actions already being taken to assess and scope the Leeds CAZ. The communications element of the proposals includes funding for the consultation that will be required to engage with key stakeholders across the city as the final CAZ plans are being determined.
- 4.5 **Taxi & Private Hire –** This element of funding provides £700,000 to support taxi & private hire (T&PH) drivers to transition to ultra-low emission vehicles (ULEV petrol-hybrid; plug-in hybrid; electric vehicles). There are almost 5,000 registered taxi and private hire vehicles licensed by Leeds City Council, over 76% of which are diesel. Typical mileage for vehicles in this sector is 50,000 per annum and can be higher. The vehicles are also predominantly active in built up urban areas,

such as the city centre and major arterial routes into and out of the city. ANPR analysis has determined that a private hire vehicle will be seen 6 times more often than a typical private car at any particular location that has been monitored by cameras. As such this sector can be determined as disproportionately contributing to air pollution.

- 4.6 This proposal is based on making available financial incentives in the form of grants to taxi and private hire drivers to realise a reduction in emissions by accelerating the transition of the T&PH fleet to ULEV. As evidenced in a Transport for London study, a single Euro 6 diesel car emits as much NOx as 1000 petrol-hybrids, as such we aim to facilitate the transition of a significant number of diesel taxis to ULEV. There is typically a cost premium when purchasing a ULEV, alongside the cost of equipping a new vehicle with T&PH livery, equipment and licensing arrangements. This funding package will provide supportive financial incentives to subsidise these costs. This funding package will be agreed with DEFRA's Joint Air Quality Unit. A campaign to deliver marketing and communications support to the trade on the benefits of transitioning to ULEV will be facilitated within this scheme.
- 4.7 This proposal will complement the implementation of a charge point network that will be facilitated by the OLEV grant secured by West Yorkshire Authorities that will deliver charge points over the next 3 years to encourage uptake of EVs. Support for hybrid is seen as an initial, or interim step change process that facilitates immediate reductions in emissions, however the focus in the medium to long term will be on plug-in vehicle replacement. This will be supplemented with a greater ability for EVs to enter this sector as the range of vehicles increases and the charge network is rolled out over the next 12-36 months, offering a second wave of emission reductions in this sector

5 Infrastructure Improvement

- 5.8 Delivery of additional electric vehicles to the Leeds Corporate Fleet is being prevented by power supply issues to depot locations. This is an issue that appears common to other local authorities and to the private sector too. This scheme seeks to determine an approach to overcome this barrier to EV take up by working in partnership with the Northern Power Grid on a £70,000 project to deliver additional power supply to a local depot to allow electric charge points to be installed. It is anticipated that this will deliver 10 charge points. Typically as fleet vehicles will be in use during the day, charge points will be made available to staff to further ULEV uptake amongst the public.
- 5.9 An additional installation of four charge points to supplement those already in situ at Woodhouse Car Park will facilitate the further replacement of four enforcement vehicles with electric models. This will mean the entre service fleet is zero emission. These points will also be made available to the public during office

hours (when the fleet are operational) therefore providing support for commuters who transition to EV's. This installations will require £10,000 in capital.

- 5.10 It is anticipated that the project, including assessment period would take approximately 6-9 months from initiation dependent on availability of NPG resources. The two installation schemes will total **£80,000**
- 5.11 Communication Campaigns To improve the quality of air in Leeds, a modal shift to sustainable and low or zero emission forms of transport is vital. This means encouraging stakeholders to switch from jumping in the car each time they travel, to using public transport or active transport such as cycling, running or walking. In terms of business, this means encouraging fleet change to lower emissions vehicles, and consolidation practices to reduce the number of delivery vehicles on our roads. It can also mean encouraging individuals to consider vehicle purchases in terms of fuel used and emissions. A significant investment on communications will be required to deliver these behaviour changes. This element of the proposal is designed to support this communications campaign, and develop this as part of a two year plus campaign that will support delivery of additional measures, prepare the city for the Clean Air Zone and support stakeholders with compliance with the CAZ and communicate the key messages on how the CAZ will operate.
- 5.12 The communications campaign delivered by Leeds will deliver messages in terms of local changes that can be made, for example publicising new Park & Ride facilities, promoting improvements to bus services, cycle routes, and additional train services and so on all with the aim of driving behaviour change to lower emission travel modes.
- 5.13 Funding is required to deliver these to the standard required and for the duration of the project to implement and administer a CAZ with minimum disruption of impact on the city. We also need to ensure that there is penetration of the key messages to the necessary sectors of the public, business and key stakeholders. This funding will also support an effective consultation process for both the initial and formal CAZ proposals as detailed below.

Activity	Timescale
Executive Board (outline solution)	December 2017
Consultation – Stage 1	January 2 nd 2018 – March 2 nd 2018
Workshops/Drop-in sessions and	
other consultation initiatives	
Executive Board (final proposal)	June 2018
Formal consultation initiation – Stage	June - August 2018
2 Workshops/Drop-in sessions and	
other consultation initiatives	

- 5.14 It is anticipated that to deliver a substantial and effective campaign to support the CAZ implementation and delivery of additional measures, such as increasing uptake of low emission vehicles will require funding of £180,000 £20,000 of this will be used to support the two public consultations.
- 5.15 The insight generated from market research activity already underway will enable us to put in place a three year city wide behaviour change campaign, taking us right up to the introduction of the CAZ. The proposed budget will allow us to choose key points over the 24 month period to raise awareness and present our call to actions in advance of the introduction of any news schemes.
- 5.16 **Bike Share Scheme -** To improve the quality of air in Leeds, a modal shift to sustainable forms of transport is vital. This means encouraging people to switch from jumping in the car each time they travel, to using public transport or active transport such as cycling, running or walking. To enable these modal shifts to take place, people need to be provided with options and flexibility.
- 5.17 Public bike share schemes are becoming increasingly popular in cities across the UK. Technological developments have allowed for the implementation of dockless bike share schemes as seen in Manchester with 'Mo-bikes'. Officers within Leeds City Council are working to choose a preferred scheme for Leeds which would deliver against the council's ambitions to increase active travel.
- 5.18 JAQU had approved funding for **£40,000** to deliver a feasibility study on the implementation of a bike share scheme this was to determine commercial viability, market and practicality of delivering a bike share scheme. However, the delay in award of funding from JAQU means that this scheme has naturally progressed with February Executive Board providing approval to work with a preferred operator to deliver a bike share scheme in Spring 2018, negating the need for a feasibility study.
- 5.19 A variation will be sought to provide an e-bike element to a public bike share scheme. It is anticipated this would create further air quality benefits by providing alternative mode choices for short-medium journeys in and around Leeds City Centre. A significant barrier to the uptake of cycling in Leeds is the geography of the city. Electric pedal bikes counter this through providing users additional power when required to undertake longer and hillier journeys that an individual might have previously been unable/unwilling to.

6 Corporate considerations

6.1 Consultation and engagement

6.1.1 Colleagues in Licensing have been consulted on the above plans to provide financial assistance to accelerate the transition to hybrid and electric vehicles amongst the taxi & private hire fleet. The Licensing Committee are also being

regularly updated on the CAZ and the need for licensing to play a role in driving up emission standards in this sector. The Executive Members for Environment & Sustainability, and also Regeneration & Transport have been consulted on this scheme.

6.1.2 Further consultation and engagement will be delivered separately through a formal public consultation exercise on the implementation of a CAZ commencing late 2017. In addition to this being a public consultation exercise accessible to all, various key groups will be targeted for their views.

6.2 Equality and diversity / cohesion and integration

- 6.2.1 Those affected by poor air quality are concentrated in our more deprived inner city areas. Deprived areas in cities typically experience heavier than average traffic and consequently potentially higher levels of pollution. Air pollution, deprivation and poor-health status combinations can create increased and disproportionate disease burdens.
- 6.2.2 The above measures to be funded by DEFRAs £1 million grant will improve air quality in Leeds and reduce the air quality health impacts in deprived areas. Improving the emissions of taxi & private hire vehicles will improve the health of drivers, and the areas they travel through.
- 6.2.3 The council is aware of other potential equality issues, as a result specific groups will be targeted for their views during the formal consultation exercise. All feedback will be used to inform decision-making, and ensure that any equality impacts that arise during the transition to hybrid/EVs are mitigated by the council where possible.

6.3 Council policies and best council plan

- 6.3.1 The Council's cutting carbon and improving air quality breakthrough project aims to deliver improvements to air quality across Leeds. The spending of this DEFRA funding will assist in the success of this wider programme of works.
- 6.3.2 The Council has an ambition to reduce health inequalities across Leeds. There is a need to reduce air pollution-related risks for all. These projects will assist in the delivery of these ambitions.

6.4 **Resources and value for money**

6.4.3 Leeds City Council has sought to bid and secure funding from numerous sources to deliver both independent and collaborative projects that seek to better understand and/or improve air quality in the city. Utilising multiple sources of funding reduces the financial burden on the Local Authority for the implementation of a Clean Air Zone.

6.4.4 The potential uses for this DEFRA grant have been carefully considered, with close scrutiny from DEFRA and JAQU. The bulk of the funding provides incentives to facilitate the transition to hybrid & EVs among taxi & private hire – a sector that disproportionately impacts on Leeds air quality per vehicle in areas of key concern due to high annual mileage and urban driving.

6.4.5 Capital & Revenue Funding and Cashflow

6.4.6 The communication campaigns element £180k to this programme is revenue spend which is provided for within the overall grant.

Injection required	TOTAL	TO MARCH		FOF	RECAST		
on this scheme		2017	2017/18	2018/19	2019/20	2020	2021
	£000's	£000's	£000's	£000's	£000's	£000's	£000's
LAND (1)	0.0					ĺ	
CONSTRUCTION (3)	80.0			80.0			
FURN & EQPT (5)	40.0			40.0			
REVENUE	180.0			180.0			
OTHER COSTS (7)	700.0			350.0	350.0		
TOTALS	1000.0	0.0	0.0	650.0	350.0	0.0	0.0
Authority to Spend	TOTAL	TO MARCH					
required for this Approval		2017	2017/18	2018/19	2019/20	2020	2021
	£000's	£000's	£000's	£000's	£000's	£000's	£000's
LAND (1)	0.0						
CONSTRUCTION (3)	80.0			80.0			
FURN & EQPT (5)	40.0			40.0			
DESIGN FEES (6)	180.0			180.0			
OTHER COSTS (7)	700.0			350.0	350.0		
TOTALS 100	1000.0	0.0	0.0	650.0	350.0	0.0	0.0
Total overall Funding	TOTAL	TO MARCH	FORECAST				
(As per latest Capital		2017	2017/18	2018/19	2019/20	2020	2021
Programme)	£000's	£000's	£000's	£000's	£000's	£000's	£000's
DEFRA Capital	820.0			470.0	350.0		
DEFRA Revenue				180.0			
Total Funding	820.0	0.0	0.0	650.0	350.0	0.0	0.0
Balance / Shortfall =	-180.0	0.0	0.0	0.0	0.0	0.0	0.0

Legal Implications, access to information and call in

6.4.7 This decision is a key decision and subject to call in.

6.5 Risk management

6.5.1 A key risk for Leeds is failure to achieve compliance with air quality standards as defined in EU directives, which have also been incorporated into national legislation. It is unclear what the exit from the EU might mean in terms of the implications for infraction fines if targets are not met. As it stands failure would mean that significant infraction fines could be passed to the local authority by the government utilising the Localism Act. Consequently air quality is included on the Corporate Risk Register and is reviewed by CLT four times a year.

- 6.5.2 Failure to improve air quality also means a risk of failing to deliver the public health benefit and that the impact in terms of early deaths and ill health associated with poor air quality is not reduced.
- 6.5.3 All schemes are considered low risk, identified risks are summarised below:
 - Taxi & Private Hire EV/Hybrid Uptake: Businesses do not engage with incentive scheme. Communication on Clean Air Zone plans will encourage this sector to recognise that they need to respond to the Air Quality issue. The case for change will be made, not just on the basis of the need to comply with CAZ engine standards – which would not require EV uptake for 2020 – but also on the basis of staff wellbeing, productivity, supporting a clean and thriving city environment and significantly – opportunity to realise efficiencies. It will be made clear that EV/Hybrid uptake can provide fleet savings through reduced fuel costs. As such the incentives to adopt EV/Hybrid vehicles can be promoted on the basis of good business sense, regardless of concern for Air Quality issues.
 - Infrastructure Improvement: Failure to identify a site to deliver scheme at. LCC has a range of depot and suitable sites where this scheme can be delivered at. Leeds currently has 50 EVs, as such there are sufficient vehicles on fleet to support this trial, with plans to add considerable number of further EVs by the end of 2018. Resource within the authority's property maintenance section and fleet management services has been identified to support this project. An initial meeting with NPG has also confirmed that they would be supportive of working with Leeds to deliver such a trial scheme.
 - **Communications:** *Behaviour Change not delivered.* Leeds City Council has experience of successful campaigns regarding behaviour change. In the case of Air Quality Campaigns, behaviour change is not being sought without significant additional measures also being utilised. Behaviour change will be encouraged through national awareness of Air Quality issues, delivery of the CAZ, supportive measures being delivered such as additional public transport provision, public health campaigns and visible engagement with business. As such there is an alignment across the programme and with wider Council Strategy and National Policy that will support behaviour change.
 - **Bike Feasibility Study:** *JAQU do not approve variation of funding.* JAQU as part of central government as required to deliver improvements to air quality as soon as possible. As a result, it is expected that as this variation would deliver further air quality improvements than the previous proposal that risk is negligible.

7 Conclusions

- 7.1 Leeds City Council is required to take action to improve air quality in the city region to ensure nitrogen dioxide levels meet international air quality targets by 2020. This will require accelerating the shift to hybrid & EVs, as well as a marked behaviour change resulting in increased usage of low emission travel modes such as public transport and active travel.
- 7.2 To support the necessary actions required, DEFRA have made available a £1 million fund to implement measures that will improve air quality. Officers have carefully considered which measures could be quickly implementable and produce an air quality improvement in Leeds.

7.3 It is anticipated that DEFRA will award funding shortly, therefore it is imperative that an appropriate finance mechanism is prepared to allow for receipt & dispersal of this funding in line with the various projects to be delivered.

8 Recommendations

- 8.1 It is recommended that the Director of Resources & Housing;
- 8.1.4 Authorise an injection and authority to spend £1 million of (DEFRA) grant on measures that will assist in the delivery of a Clean Air Zone for Leeds. This spending is broken down into:
 - Support for ULEV Taxi & Private Hire Vehicles £700,000
 - Infrastructure improvement £80,000
 - Communications Campaign £180,000 (Revenue)
 - Bike share scheme £40,000

9.0 Background documents¹

9.1 None

¹ The background documents listed in this section are available for download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.